

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-25 (canceled).

Claim 26 (currently amended): An apparatus for mixing a substance with a liquid, the substance being contained in a container assembly having a sealed container that contains the substance, the container assembly also having a port assembly to permit substance to flow from the sealed container when coupled, the apparatus comprising:

a receiving chamber for receiving the container assembly;

a container assembly controller ~~operatively coupled~~ in communication with the receiving chamber, ~~the container assembly controller~~ for controlling coupling of the container and the port assembly without allowing decoupling of the container and the port assembly; and

a liquid controller operatively coupled with the receiving chamber, ~~the liquid controller~~ for controlling the flow of the liquid into the container to produce a combined substance and liquid.

Claim 27 (original): The apparatus as defined by claim 26 wherein the liquid controller controls flow of the liquid to also control the flow of combined substance and liquid from the container.

Claim 28 (original): The apparatus as defined by claim 26 wherein the container assembly controller mechanically moves at least a portion of the container assembly to couple the container with the port assembly.

Claim 29 (original): The apparatus as defined by claim 26 wherein the container assembly controller includes logic for detecting the relative locations of the container and the port assembly.

Claim 30 (original): The apparatus as defined by claim 26 wherein the receiving chamber has a cover capable of being in either one of an open position and a closed position, the cover securing the container assembly within the receiving chamber when in the closed position, the container assembly controller having logic for detecting if the cover is in the closed position.

Claim 31 (original): The apparatus as defined by claim 30 wherein the container assembly controller permits the container to couple with the port assembly after detecting that the cover is in the closed position.

Claim 32 (original): The apparatus as defined by claim 30 further including a cover lock that prevents the cover from being moved from the closed position while the liquid is being received by the container.

Claim 33 (currently amended): The apparatus as defined by claim 26 further including a pneumatically controlled member within the receiving chamber, the pneumatically controlled member capable of contributing to the coupling of the container assembly in response to ~~commands from~~ the container assembly controller.

Claim 34 (original): The apparatus as defined by claim 26 wherein the liquid controller includes logic that stores a value representing a predetermined amount of liquid to be received by the container assembly.

Claim 35 (original): The apparatus as defined by claim 26 further comprising a housing containing at least one of the container assembly controller and the liquid controller.

Claim 36 (original): The apparatus as defined by claim 26 wherein the receiving chamber at least partially extends outwardly from the housing.

Claim 37 (original): The apparatus as defined by claim 26 further comprising a sensor within the receiving chamber for detecting the location of the container within the receiving chamber.

Claim 38 (original): The apparatus as defined by claim 26 wherein the receiving chamber is configured to contain the container assembly in a single orientation.

Claim 39 (original): The apparatus as defined by claim 26 further comprising a set of valves controlled by the liquid controller to control the flow of liquid into the container.

Claim 40 (original): The apparatus as defined by claim 26 further comprising a cassette used by the liquid controller to measure the volume of the liquid to be directed to the container.

Claim 41 (original): The apparatus as defined by claim 26 wherein the substance is a caustic solution.

Claim 42 (original): The apparatus as defined by claim 26 wherein the substance is an anti-pathogen compound.

Claim 43 (original): The apparatus as defined by claim 26, wherein the container assembly includes a container receptacle for holding the container and locking with the port assembly.

Claim 44 (original): The apparatus as defined by claim 43, wherein the container receptacle includes a first locking feature that interfaces with a corresponding second locking feature of the port assembly.

Claim 45 (original): The apparatus as defined by claim 44, wherein the first locking feature comprises a plurality of port assembly engagement teeth, and wherein the port assembly comprises a corresponding locking feature that engages the plurality of port assembly engagement teeth.

Claim 46 (original): The apparatus as defined by claim 45, wherein the container receptacle includes a plurality of tabs, each tab having port assembly engagement teeth, wherein the port assembly engagement teeth on adjacent tabs are staggered relative to one another.

Claim 47 (original): The apparatus as defined by claim 46, wherein the port assembly engagement teeth are staggered by approximately half the height of a tooth.

Claim 48 (original): The apparatus defined by claim 43, wherein the container receptacle comprises at least one raised switch engagement feature on an outer surface of the container receptacle for operating a sensor within the receiving chamber.

Claim 49 (currently amended): An apparatus for mixing a substance with a liquid, the substance being contained in a container assembly having a sealed container that contains the substance, the container assembly also having a port assembly to permit substance to flow from the sealed container when coupled, the apparatus comprising:

means for receiving the container assembly;

coupling means for controlling coupling of the container and the port assembly without allowing decoupling of the container and the port assembly; and

flow means for controlling the flow of the liquid into the container to produce a combined substance and liquid.

Claim 50 (original): The apparatus as defined by claim 49 wherein the flow means controls flow of the liquid to also control the flow of combined substance and liquid from the container.

Claim 51 (original): The apparatus as defined by claim 49 wherein the coupling means includes means for mechanically moving at least a portion of the container assembly to couple the container with the port assembly.

Claim 52 (currently amended): The apparatus as defined by claim 49 wherein the coupling means includes means for detecting the relative locations of the container and the port assembly.

Claim 53 (original): The apparatus as defined by claim 49 wherein the receiving means has a cover capable of being in either one of an open position and a closed position, the cover securing the container assembly within the receiving means when in the closed position, the coupling means having means for detecting if the cover is in the closed position.

Claim 54 (original): The apparatus as defined by claim 53 wherein the coupling means permits the container to couple with the port assembly after detecting that the cover is in the closed position.

Claim 55 (original): The apparatus as defined by claim 53 further including a cover lock that prevents the cover from being moved from the closed position while the liquid is being received by the container.

Claim 56 (currently amended): The apparatus as defined by claim 49 further including a pneumatically controlled means within the receiving means, the pneumatically controlled means capable of contributing to the coupling of the container assembly in response to ~~commands from~~ the coupling means.

Claim 57 (original): The apparatus as defined by claim 49 wherein the flow means includes means for storing a value representing a predetermined amount of liquid to be received by the container assembly.

Claim 58 (original): The apparatus as defined by claim 49 further comprising a housing containing at least one of the coupling means and the flow means.

Claim 59 (original): The apparatus as defined by claim 49 wherein the receiving means at least partially extends outwardly from the housing.

Claim 60 (original): The apparatus as defined by claim 49 further comprising a means for detecting the location of the container within the receiving means.

Claim 61 (original): The apparatus as defined by claim 49 wherein the receiving means is configured to contain the container assembly in a single orientation.

Claim 62 (original): The apparatus as defined by claim 49 further comprising a set of valves controlled by the flow means to control the flow of liquid into the container.

Claim 63 (original): The apparatus as defined by claim 49 further comprising a means for measuring the volume of the liquid to be directed to the container, the measuring means being used by the flow means.

Claim 64 (original): The apparatus as defined by claim 49 wherein the substance is a caustic substance.

Claim 65 (original): The apparatus as defined by claim 49 wherein the substance is an anti-pathogen compound.

Claim 66 (new): The apparatus as defined by claim 26 wherein the receiving chamber is cylindrical.

Claim 67 (new): The apparatus as defined by claim 26 wherein the receiving chamber has a cover for securing the port assembly within the receiving chamber, and

wherein the container assembly controller is operably coupled to move the container within the receiving chamber so as to couple the container and the port assembly.

Claim 68 (new): The apparatus as defined by claim 33 further including an inflatable bladder in communication with the pneumatically controlled member for pneumatic control of the pneumatically controlled member in response to the container assembly controller.

Claim 69 (new): The apparatus as defined by claim 49 wherein the receiving means is cylindrical.

Claim 70 (new): The apparatus as defined by claim 49 wherein receiving means includes means for securing the port assembly and wherein the coupling means includes means for moving the container so as to couple the container and the port assembly.

Claim 71 (new): The apparatus as defined by claim 56 wherein the pneumatically controlled means includes a pneumatically controlled member and an inflatable means in communication with the pneumatically controlled member for pneumatic control of the pneumatically controlled member in response to the coupling means.